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ATTORNEYS AT LAW

ORIGINAL

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May 5, 2000

VIA COURIER

Magalie Roman Salas, Esquire  
Secretary  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, D.C. 20554

RECEIVED  
MAY 05 2000  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Attention: Chief, Allocations Branch  
Policy and Rules Division  
Mass Media Bureau

Re: WLEX-TV , Lexington, Kentucky  
Facility ID No. 73203  
Amendment to Petition to Amend the DTV Table of Allotments

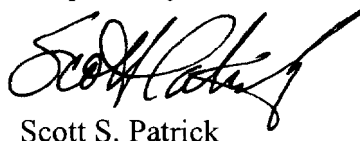
Dear Ms. Salas:

On behalf of WLEX Communications, LLC, licensee of WLEX-TV , Lexington, Kentucky, we hereby amend its *Petition for Rule Making* proposing a substitution of channel 39 for channel 22 as the station's paired DTV allocation. The amendment is a "stamp-and-return" copy of a construction permit application for proposed digital facilities filed May 1, 2000, pursuant to the Community Broadcasters Protection Act of 1999, Pub. L. No. 106-113, 113 Stat. Appendix I, *codified at* 47 U.S.C. § 336(f).

The initial petition was submitted on April 20, 2000 and has not yet appeared on public notice. The Commission has taken no formal action on the petition.

If any additional information is needed in connection with this matter, please contact me.

Respectfully submitted,

  
Scott S. Patrick

Enclosure

No. of Copies rec'd  
List ABCDE

075

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FACSIMILE 770-901-8874

May 1, 2000

**VIA BERRY BEST**

Federal Communications Commission  
Mass Media Services  
P.O. Box 358165  
Pittsburgh, Pennsylvania 15251-5165

Attention: Stop Code 1800E1  
Television Branch

Re: **FACILITY ID No. 73203**  
Television Station WLEX-TV, Lexington, Kentucky  
Application to Construct Digital Television Facilities

Dear Sir or Madam:

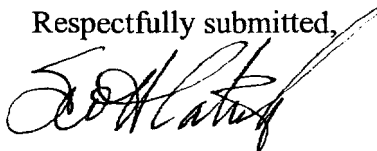
On behalf of WLEX Communications, LLC ("WLEX"), licensee of Television Station WLEX-TV, Lexington, Kentucky, we submit herewith, in triplicate, an application for authority to construct digital television facilities on DTV Channel 39, the channel proposed in a Petition for Rule Making submitted April 20, 2000. This application is filed pursuant to the Community Broadcasters Protection Act of 1999, Pub. L. No. 106-113, 113 Stat. Appendix I, *codified at* 47 U.S.C. §336(f) ("CBPA"). A notice of intent to maximize facilities was timely filed.

WLEX is filing the application for authority to construct on DTV Channel 39 despite that the Commission has not yet had the opportunity to act on the Petition for Rule Making. Accordingly, a request for waiver of 47 C.F.R. §73.3572 is enclosed as Exhibit No. 1. WLEX requests that the Commission defer processing the application until such time as it has acted upon the Petition for Rule Making. To the extent necessary, a request for waiver of the prohibition against contingent applications is enclosed as Exhibit No. 2.

A check in the amount of \$725.00, accompanied by FCC Form 159, is enclosed to cover the filing fee.

Kindly let me know if you have any questions about this application.

Respectfully submitted,



Scott S. Patrick

Enclosure

MAY 01 2000  
**STAMP & RETURN**

**WLEX-TV 18**P.O. BOX 1457  
LEXINGTON, KY 40591-1457**Bank of America.**

Charleston, South Carolina

67-448  
539CHECK  
NO.**321740**

DATE 4/21/00

AMOUNT

\$725.00

PAY SEVEN HUNDRED TWENTY-FIVE DOLLARS AND NO CENTS

TO THE  
ORDER OF

FEDERAL COMMUNICATIONS COMMISSION

WLEX COMMUNICATIONS, LLC

  
AUTHORIZED SIGNATURE

⑈321740⑈ ⑆053904483⑆ 000010010767⑈

PLEASE DETACH CHECK FROM STUB BEFORE DEPOSITING

NO. **321740**

INVOICE NUMBER	INVOICE DATE	DESCRIPTION	GL #	AMOUNT
		FILING FEE	88-00800	725.00

DETACH AND RETAIN THIS STATEMENT

TOTAL

FCC FORM 159 JULY 1997 (REVISED)

FOR  
FCC  
USE  
ONLY

## FCC 301

### APPLICATION FOR CONSTRUCTION PERMIT FOR COMMERCIAL BROADCAST STATION

FOR COMMISSION USE ONLY  
FILE NO.

#### Section I - General Information

1. Legal Name of the Applicant		
WLEX Communications, LLC		
Mailing Address		
P.O. Box 1457		
City	State or Country (if foreign address)	ZIP Code
Lexington	Kentucky	40505
Telephone Number (include area code)	E-Mail Address (if available)	
(606) 259-1818		
	Call Sign	Facility ID Number
	WLEX-TV	73203
2. Contact Representative (if other than applicant)		
Scott S. Patrick		Firm or Company Name
Dow, Lohnes & Alberson, PLLC		
Telephone Number (include area code)	E-Mail Address (if available)	
(202) 776-2885	spatrick@dlalaw.com	

3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):

☐ Governmental Entity ☐ Other \_\_\_\_\_

#### 4. Application Purpose.

- |   |  |
|---|--|
| <input type="checkbox"/> New station                                  | <input type="checkbox"/> Major Modification of construction permit |
| <input type="checkbox"/> Major Change in licensed facility            | <input type="checkbox"/> Minor Modification of construction permit |
| <input checked="" type="checkbox"/> Minor Change in licensed facility | <input type="checkbox"/> Major Amendment to pending application    |
|   | <input type="checkbox"/> Minor Amendment to pending application    |

a. File number of original construction permit: \_\_\_\_\_ ☒ N/A

b. Service Type: ☐ AM ☐ FM ☐ TV ☒ DTV

c. Community of License:

City	State
Lexington	KY

d. Facility Type: ☒ Main ☐ Auxiliary

If an amendment, submit as an Exhibit a listing by Section and Question Number of the portions of the pending application that are being revised.

Exhibit No.

**NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.**

## Section II - Legal

1. **Certification.** Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets. ☒ Yes ☐ No

2. **Parties to the Application.**

- a. List the applicant, and, if other than a natural person, its officers, directors, stockholders with attributable interests, non-insulated partners and/or members. If a corporation or partnership holds an attributable interest in the applicant, list separately its officers, directors, stockholders with attributable interests, non-insulated partners and/or members. Create a separate row for each individual or entity. Attach additional pages if necessary.

- |   |  |
|---|--|
| (1) Name and address of the applicant and, if applicable, its officers, directors, stockholders, or partners (if other than individual also show name, address and citizenship of natural person authorized to vote the stock). List the applicant first, officers next, then directors and, thereafter, remaining stockholders and partners. | (2) Citizenship.   |
|   | (3) Positional Interest: Officer, director, general partner, limited partner, LLC member, etc. |
|   | (4) Percentage of votes.   |
|   | (5) Percentage of equity.  |

(1)	(2)	(3)	(4)	(5)

- b. Applicant certifies that equity interests not set forth above are non-attributable.

☐ Yes ☐ No

See Explanation  
in Exhibit No.

☐ N/A

3. **Other Authorizations.** List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest.

Exhibit No.

☐ N/A

4. **Multiple Ownership.**

- a. Applicant certifies that the proposed facility:

☐ Yes ☐ No

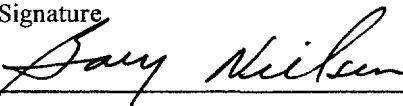
See Explanation  
in Exhibit No.

1. complies with the Commission's multiple and cross-ownership rules;
2. does not present an issue under the Commission's cross-interest policy;
3. does not present an issue under the Commission's policies relating to media interests of immediate family members;
4. complies with the Commission's policies relating to future ownership interests; and
5. complies with the Commission's restrictions relating to the insulation and non-participation of non-party investors and creditors.

## Section II - Legal

- b. **Radio Applicants Only.** If the grant of the application would result in certain principal community service contour overlaps, see Local Radio Ownership Worksheet, Question 1, applicant certifies that all relevant information has been placed in public inspection file(s) and submitted to the Commission. ☐ Yes ☐ No ☐ N/A See Explanation in Exhibit No.
5. **Character Issues.** Applicant certifies that neither applicant nor any party to the application has or has had any interest in, or connection with: ☐ Yes ☐ No See Explanation in Exhibit No.
- a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or
- b. any pending broadcast application in which character issues have been raised.
6. **Adverse Findings.** Applicant certifies that, with respect to the applicant and any party to the application, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination. ☐ Yes ☐ No See Explanation in Exhibit No.
7. **Alien Ownership and Control.** Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments. ☐ Yes ☐ No See Explanation in Exhibit No.
8. **Program Service Certification.** Applicant certifies that it is cognizant of and will comply with its obligations as a Commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area. ☐ Yes ☐ No
9. **Local Public Notice.** Applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580. ☐ Yes ☐ No
10. **Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable. ☐ Yes ☐ No ☐ N/A
- An exhibit is required unless this question is inapplicable.** Exhibit No.
11. **Anti-Drug Abuse Act Certification.** Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862. ☒ Yes ☐ No

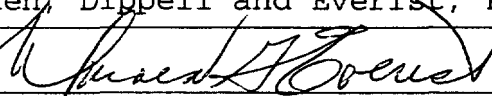
I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing Gary <sup>ie</sup> Neilsen	Typed or Printed Title of Person Signing President
Signature 	Date 4.20.00

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT  
(U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT  
(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

### SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name Donald G. Everist Cohen, Dippell and Everist, P.C.		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date April 10, 2000	
Mailing Address 1300 L Street, N.W., Suite 1100			
City Washington		State or Country (if foreign address) D.C.	ZIP Code 20005
Telephone Number (include area code) (202) 898-0111		E-Mail Address (if available) cdepc@worldnet.att.net	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT  
(U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT  
(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).



Complete Questions 1-5 of the Certification Checklist and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.

**Certification Checklist:** A correct answer of "Yes" to all of the questions below will ensure an expeditious grant of a construction permit. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:

- (a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☒ No
- (b) It will operate from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☒ No
- (c) It will operate with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☒ No

2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. ☒ Yes ☐ No

Applicant must submit the Exhibit called for in Item 13.

3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community. ☒ Yes ☐ No
4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable. ☒ Yes ☐ No
5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7. ☒ Yes ☐ No

## SECTION III-D DTV Engineering

WLEX-DT

## TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

## TECH BOX

1. Channel Number: DTV 39 Analog TV, if any 18

2. Zone: ☐ I ☒ II ☐ III

3. Antenna Location Coordinates: (NAD 27)

38 ° 02 ' 03 " ☒ N ☐ S Latitude  
84 ° 23 ' 39 " ☐ E ☒ W Longitude

4. Antenna Structure Registration Number: 1044034  
☒ Not applicable ☐ FAA Notification Filed with FAA

5. Antenna Location Site Elevation Above Mean Sea Level: 304.8 meters

6. Overall Tower Height Above Ground Level: 303.0 meters

7. Height of Radiation Center Above Ground Level: 277.6 meters

8. Height of Radiation Center Above Average Terrain: 288.1 meters

9. Maximum Effective Radiated Power (average power): 800.0 kW

10. Antenna Specifications:

a.	Manufacturer <u>Dielectric</u>	Model <u>TFU-30GTH 06</u>
----	-----------------------------------	------------------------------

b. Electrical Beam Tilt: 0.75 degrees ☐ Not Applicable

c. Mechanical Beam Tilt: \_\_\_\_\_ degrees toward azimuth \_\_\_\_\_ degrees True ☒ Not Applicable

Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).

Exhibit No.  
E-2a, b, c

d. Polarization: ☒ Horizontal ☐ Circular ☐ Elliptical

## TECH BOX

e. Directional Antenna Relative Field Values: ☒ Not applicable (Nondirectional)Rotation: \_\_\_\_\_ ° ☐ No rotation

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.**

Exhibit No.  
NA

11. Does the proposed facility satisfy the interference protection provisions of 47 C.F.R. Section 73.623(a)? (Applicable only if **Certification Checklist** Items 1(a), (b), or (c) are answered "No.") ☒ Yes ☐ No

If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.

Exhibit No.  
NA

12. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefor. (Applicable only if **Certification Checklist** Item 3 is answered "No.")

Exhibit No.  
NA

13. **Environmental Protection Act. Submit in an Exhibit the following:**

Exhibit No.  
see text

- a. If **Certification Checklist** Item 3 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

By checking "Yes" to **Certification Checklist** Item 3, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist** Item 3 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

**PREPARER'S CERTIFICATION IN SECTION III MUST BE COMPLETED AND SIGNED.**

ENGINEERING STATEMENT  
RE DTV BROADCAST ENGINEERING DATA  
ON BEHALF OF  
WLEX-TV COMMUNICATIONS, LLC.  
WLEX-DT, LEXINGTON, KENTUCKY  
CHANNEL 39 800 KW ERP 288 METERS HAAT

APRIL 2000

COHEN, DIPPELL AND EVERIST, P.C.  
CONSULTING ENGINEERS  
RADIO AND TELEVISION  
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington            )  
  ) ss  
District of Columbia         )

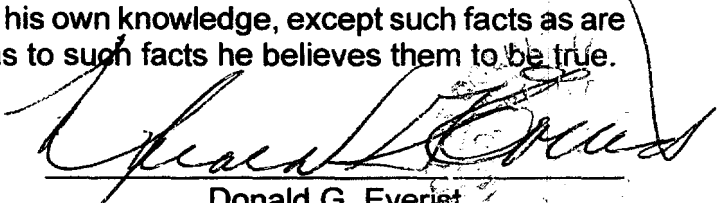
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

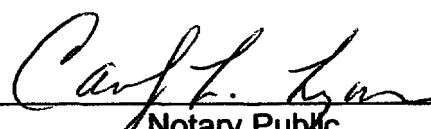
That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

  
\_\_\_\_\_  
Donald G. Everist  
District of Columbia  
Professional Engineer  
Registration No. 5714

Subscribed and sworn to before me this 10<sup>th</sup> day of April, 2000.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: 2/28/2003

COHEN, DIPPELL AND EVERIST, P. C.

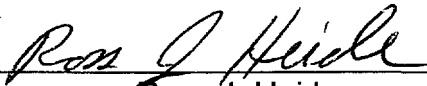
City of Washington            )  
  ) ss  
District of Columbia         )

Ross J. Heide, being duly sworn upon his oath, deposes and states that:

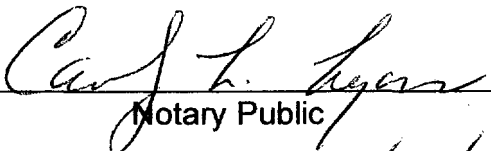
He is a graduate of the Massachusetts Institute of Technology in Operations Research and Management Science, and is a staff engineer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

  
\_\_\_\_\_  
Ross J. Heide  
District of Columbia

Subscribed and sworn to before me this 7<sup>th</sup> day of April, 2000.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: 2/28/2003

This engineering statement has been prepared on behalf of WLEX-TV Communications, LLC, licensee of WLEX-TV, Lexington, Kentucky. The purpose of this engineering statement is to accompany its application to construct digital television ("DTV") facilities; specifically to explain and supplement those data required in FCC Form 301, Section III-D.

WLEX-TV is licensed to operate on NTSC television Channel 18 with a maximum visual effective radiated power ("ERP") of 1100 kW (horizontal polarization) and height above average terrain ("HAAT") of 195 meters (640 feet). WLEX-DT has been allocated DTV Channel 22 with facilities of 50 kW ERP (maximum directional) and HAAT of 195 meters in the revised DTV Table of Allotments.<sup>1</sup> Under separate cover, WLEX-DT has petitioned the Commission to allot Channel 39 to WLEX-DT in place of Channel 22. WLEX-DT proposes to construct DTV facilities for Channel 39 of 800 kW (non-directional, horizontal polarization) with HAAT of 288 meters at an existing site approximately 9 km east-southeast of the allotted site.

The proposed antenna will be the lower section of a two-stack system and will be top-mounted on a modified existing tower. Figure 1 shows a tower sketch and the antenna arrangement on the tower.

According to the FCC engineering data base as of December 30, 1999, there are no AM stations located within 3.2 km of the existing WLEX-DT tower site and there are no FM stations within 100 meters. The tower currently supports the licensed operation of WTVQ-TV, Channel 36,

---

<sup>1</sup>In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service", MM Docket No. 87-286, Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders (FCC 98-315), 12/18/98, DTV Table of Allotments, Appendix B, Page B-56.

Lexington, Kentucky. Also WTVQ-DT, Channel 40 has applied to use this site for its DTV operation (BPCDT-19991025DD).

The WLEX-DT antenna will be the lower section of a top-mounted two-section stacked antenna system. The existing tower will be modified such that the WTVQ-TV, Channel 36 antenna remains in the same position and the overall height above ground of the tower (303.0 meters) does not change. The existing transmitter site is located at 2940 Bryant Road, Lexington, Kentucky. The tower registration number is 1044034.

The geographic coordinates of the site are:

North Latitude: 38° 02' 03"

West Longitude: 84° 23' 39"

NAD-27

#### Equipment Data

Antenna: Dielectric, Type TFU-30GTH O6 (or equivalent) horizontally polarized antenna with 0.75° electrical beam tilt. The vertical and horizontal plane patterns and other exhibits required by Section 73.625(c) are herein included.

#### Power Data

Transmitter output	36.49 kW	15.62 dBk
Transmission line efficiency/loss Type EIA 75 ohm 8-3/16" rigid coax or equivalent 305 m (1000 ft)	81.20%	0.90 dB
Antenna input	29.63 kW	14.72 dBk
Antenna gain, peak	27.00	14.31

dB



Antenna gain, horizontal plane	18.70	12.72
		dB
Effective Radiated Power, peak	800.0 kW	29.03 dBk
Max. ERP, horizontal plane	554.1 kW	27.44 dBk

Elevation Data

Vertical dimension of Channel 39, lower section of top-mounted two-part stack antenna	15.3 meters 50.2 feet
Overall height above ground of the proposed antenna structure (including beacon)	303.0 meters 994.0 feet
Center of radiation of Channel 39 antenna above ground	277.6 meters 910.9 feet
Elevation of site above mean sea level	304.8 meters 1000.0 feet
Center of radiation of Channel 39 antenna above mean sea level	582.4 meters 1910.9 feet
Overall height above mean sea level of proposed tower (including beacon)	607.8 meters 1994.0 feet
Antenna height above average terrain	288.1 meters

Note: Slight height differences result due to conversion to metric.

Coverage

The average elevation data for 3.2 to 16.1 km along each radial have been determined based upon 3-second NGDC terrain data. The F(50,90) DTV coverage contour has been computed from reference to the propagation data for Channels 14-69, as published by the FCC in Figure 10b and Figure 10c, Section 73.699 of the FCC Rules and Regulations.

Utilizing the formula in Section 73.625(b)(2) of the Rules for the effective heights, it is found that the depression angle,  $A_m$ , varies from 0.46 to 0.48 degrees. Since the relative vertical field is greater than 90% of the maximum at these depression angles, the maximum power was used in determining the distance to the DTV contour.

Table 1 includes the distances to the 41 dBu F(50,90) coverage contour, the average elevation 3.2 to 16.1 km, and the antenna height above average terrain for the eight radials. Figure 2 shows the contour and the city of license within this contour.

#### Interference Analysis

A study of predicted interference caused by the proposed WLEX-DT service has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (July 2, 1997) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998). The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a Windows98/Intel platform. Comparison of service/interference areas and populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, e.g., new interference equals total interference less baseline interference. The effect is further reduced for ratios of calculated population values, e.g., incremental population affected as a percent of total population  $\leq$  served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 4 km<sup>2</sup> using

3-second terrain data sampled approximately every 0.1 km at one degree azimuth intervals with 1990 census centroids. All studies are based upon data in the December 30, 1999 update of the FCC's engineering data base.

Table 2 lists the potential interferees which are to be considered according to the processing guidelines cited above. The last column of Table 2 shows the predicted new interference caused by the proposed WLEX-DT operation. Where the upper limit of new interference is given (less than; "<" indicated), interference was predicted presuming 1000 kW ERP for WLEX-DT. None of the affected NTSC stations suffer more than 2% new interference from WLEX-DT or 10% total new interference new from all DTV stations. None of the affected DTV stations are predicted to receive more than 2% new interference from WLEX-DT or total interference that reduces their predicted coverage to less than 90% replication.

#### Other Licensed and Broadcast Facilities

No adverse technical effect is anticipated by the proposed DTV operation to any other FCC licensed facility. If required, the applicant will install filters or take other measures as necessary to resolve the problem.

#### FCC Rule, Section 1.1307

The proposed 800 kW operation will utilize the Dielectric, Type TFU-30GTH O6 antenna (or equivalent) described above with a center of radiation above ground of 277.6 meters. The proposed two-stack antenna will be top-mounted on a modified self-supporting steel lattice tower with an overall height of 303 meters above ground.

As previously indicated, there are no AM stations located within 3.2 km of the proposed tower site. According to the FCC data base (December 30, 1999 update), the only station located within 100 meters is WTVQ-TV on the same tower. Also, WTVQ-DT is expected to locate on the same tower and is included in the RFF calculations below. The existing site and tower is owned by Media General Broadcasting, Inc., licensee of WTVQ-TV. According to the owner, access to the tower property is prevented by an eight foot security fence with a locked gate.

The proposed operation based upon the current OET Bulletin No. 65, Edition 97-01 dated August 1997 and Supplement A meets the provisions of the FCC radio frequency field ("RFF") guidelines, and thus, complies with Section 1.1307 of the FCC Rules. The elevation pattern for the Dielectric, Type TFU-30GTH O6 antenna [Exhibit E-2b] shows a maximum relative field of less than 0.06 toward the ground (50° to 90° below the horizontal). Calculation according to OST Bulletin 65 predicts a maximum RFF power density of less than  $2 \mu\text{W}/\text{cm}^2$ , 2 meters above ground or less than 0.5% of the uncontrolled (general public) Maximum Permissible Exposure ("MPE") guideline.

The licensed operation of WTVQ-TV on Channel 36 utilizes an RCA, Type TFU-25G antenna with a center of radiation above ground of 293.5 meters. The manufacturer's published data indicate the relative field toward the ground in the vicinity of the tower (50° to 70° below the horizontal) does not exceed 0.1. Calculation according to OST Bulletin 65 as above predicts a maximum RFF power density of less than  $5 \mu\text{W}/\text{cm}^2$ , 2 meters above ground or less than 1.2% of the uncontrolled (general public) MPE guideline.

The application for WTVQ-DT (BPCDT-991025DD) predicts an RFF contribution of WTVQ-DT of less than 1% the uncontrolled MPE guidelines. The total predicted RFF contribution

(2 meters AGL) of the three stations expected to operate for the existing tower (WLEX-DT, WTVQ-DT and WTVQ-TV) is less than 3% of the uncontrolled (general public) MPE guidelines.

According to the applicant, RFF safety will be coordinated with the site owner.

Authorized personnel and rigging contractors will be alerted to the potential zone of high radiation on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on or near the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

An environmental assessment (EA) is categorically excluded under Section 1.1307 of the FCC Rules and Regulations since the site owner and the licensee indicate that:

- (a)(1) The existing facilities are not located in an officially designated wilderness area.
- (a)(2) The existing facilities are not located in an officially designated wildlife preserve.
- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species and are not likely to result in the destruction or adverse modification of proposed critical habitats.
- (a)(4) The proposed facilities will not affect any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The existing facilities are not located near any known Indian religious sites.
- (a)(6) The existing facilities are not located in a flood plain.

- (a)(7) The installation of the DTV facilities on a modified tower at an existing site will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) It is not proposed to equip the tower with high intensity white lights unless required by the FAA.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines. Authorized personnel will be alerted to areas unauthorized on the tower where potential radiation levels are in excess of the FCC guidelines. A security fence with a locked gate prevents unauthorized access to the tower site.

COHEN, DIPPELL AND EVERIST, P. C.

TABLE 2  
INTERFERENCE SUMMARY  
WLEX-DT, CHANNEL 39, LEXINGTON, KENTUCKY  
MARCH 2000

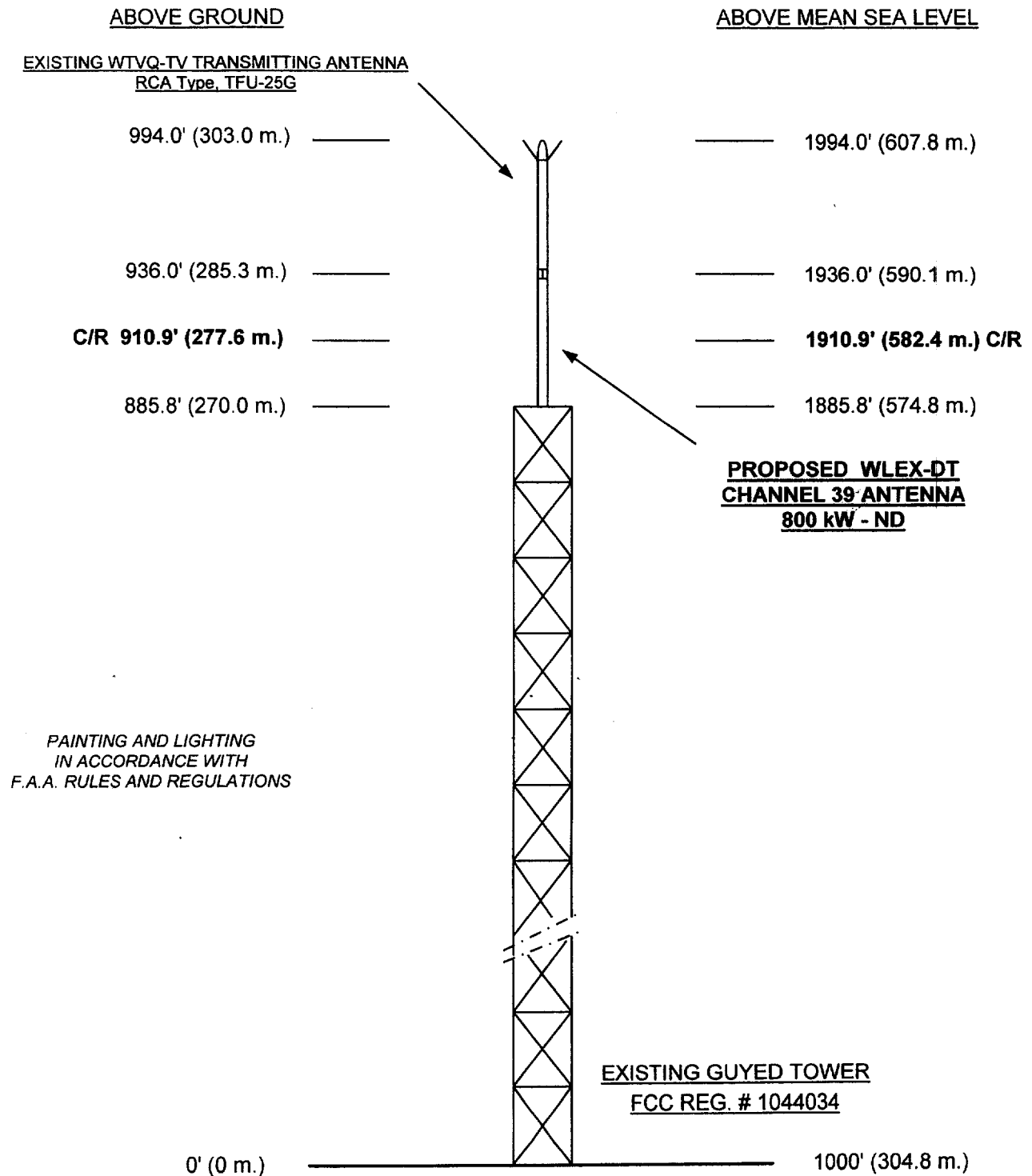
Baseline WLEX-DT: Allotment, Channel 22, 50 kW, 195 meters HAAT, N38°03'56", W84°29'13"  
(NAD-27)  
Proposed Change: Channel 39, 800 kW, C/R 598 meters AMSL, N38°02'03", W84°23'39"  
(NAD-27)

<u>Affected Station</u>	<u>Appendix B<sup>1</sup></u>	<u>Distance/Bearing</u>	<u>New Interference % of Population Served</u>
WKMR-TV, CH.38, Morehead, KY Lic., 676 kW, 305 meters HAAT	0.4% interference	88.2 km/79.3°	1.8%
WEMT-TV, CH.39, Greeneville, TN Lic., 3020 kW, 802 meters HAAT	1.0% interference	268.5 km/145.8°	<0.5%
WHTN-TV, CH.39, Murfreesboro, TN Lic., 5000 kW, 250 meters HAAT	2.5% interference	282.5 km/220.4°	<0.5%
<u>Affected DTV Stations:</u>			
WKMJ-DT, CH.38, Louisville, KY Allot., 50 kW*, 249 meters HAAT	99.5% area match	131.2 km/286.9°	<0.3%
WLPX-DT, CH.39, Charleston, WV App., 1000 kW, 350 meters HAAT	N/A	234.2 km/77.2°	1.5%
WKOI-DT, CH.39, Richmond, IN App., 500 kW, 281 meters HAAT	N/A	165.4 km/352.8°	0.7%
WBAK-DT, CH.39, Terre Haute, IN Allot., 56.8 Kw*, 299 meters HAAT	100.0% area match	293.4 km/298.0°	<0.6%

\*Studied at 200 kW

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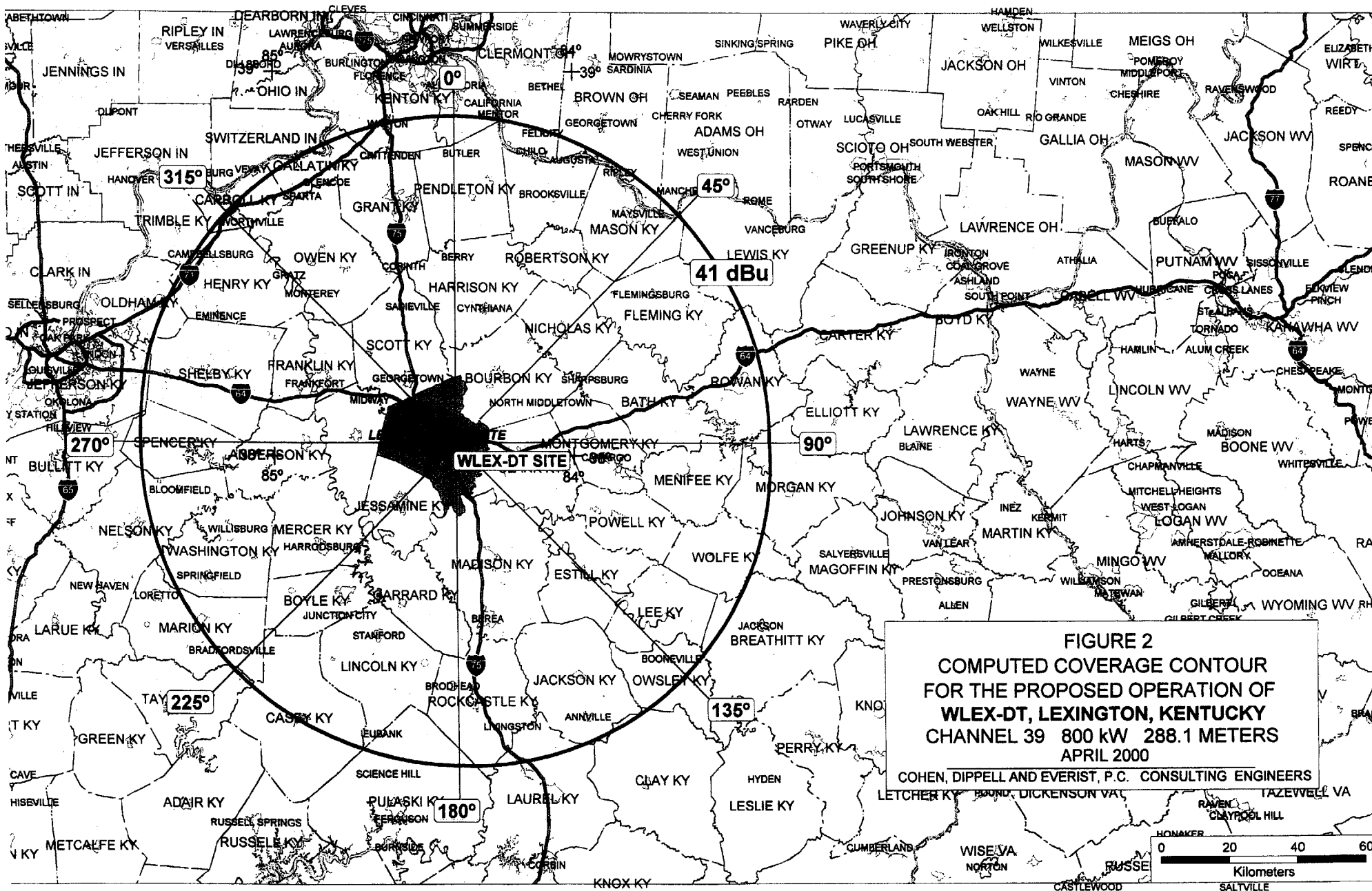
<sup>1</sup>See Appendix B, Table of Allotments, Page B-24.



(NOT TO SCALE)

FIGURE 1  
 WLEX-DT OPERATION  
 AT WTVQ-TV SITE  
 CHANNEL 39 800 kW ND  
 APRIL 2000





COHEN, DIPPELL AND EVERIST, P. C.

TABLE 1  
DTV COVERAGE DATA  
FOR THE PROPOSED OPERATION OF  
WLEX-DT, LEXINGTON, KENTUCKY  
APRIL 2000

<u>Radial</u> N °E, T	<u>Effective</u> <u>Height</u> meters	<u>Depression</u> <u>Angle</u> degrees	<u>ERP at</u> <u>0.75° Tilt</u> kW	<u>Distance to</u> <u>41 dBu</u> <u>F(50,90)</u> <u>Contour</u> km
0	296.0	0.48	800	94.3
45	286.4	0.47	800	93.1
90	279.4	0.46	800	92.1
135	299.1	0.48	800	94.7
180	286.1	0.47	800	93.0
225	281.9	0.47	800	92.4
270	281.6	0.46	800	92.4
315	294.2	0.48	800	94.1
Average	288.1			

DTV Channel 39 (620-626 MHz)  
Average Elevation 3.2 to 16.1 km 294.3 meters AMSL  
Center of Radiation 582.4 meters AMSL  
Antenna Height Above Average Terrain 288.1 meters  
Site Elevation 304.8 meters AMSL  
Effective Radiated Power:  
800 kW (29.03 dBk) Max. at 0.75° tilt

(NAD-27)

North Latitude: 38° 02' 03"  
West Longitude: 84° 23' 39"



## SYSTEM SUMMARY

### Antenna:

Type:	TFU-30GTH O6	ERP:	800 kW	( 29.03 dBk )
Channel:	39	Gain:*	27.0	( 14.31 dB )
Location:	WLEX-DT Lexington, KY	Input Power:	29.63 kW	( 14.72 dBk )

H Pol

### Transmission Line:

Type:	EIA Style TL	Attenuation:	0.91 dB
Size:	8" 75 ohm	Efficiency:	81.2%
Length	1000 ft	305 m	

### Transmitter:

Average Power Required: 36.50 kW ( 15.62 dBk )

\* Gain is with respect to half wave dipole.



## **MECHANICAL SPECIFICATIONS**

### **Antenna:**

Type: **TFU-30GTH O6**  
Channel: **39**  
Location: **Lexington, KY**

Antenna Length (H2): **50.2 ft**  
With Lightning Protector (H4): **54.2 ft**  
Center of Radiation (H3): **25.1 ft**

Peak Gain\*: **27.0 (14.31 dB)**  
Gain\* at Horizontal: **18.7 (12.72 dB)**

\* Gain is with respect to half wave dipole.



Exhibit No.  
E-2a

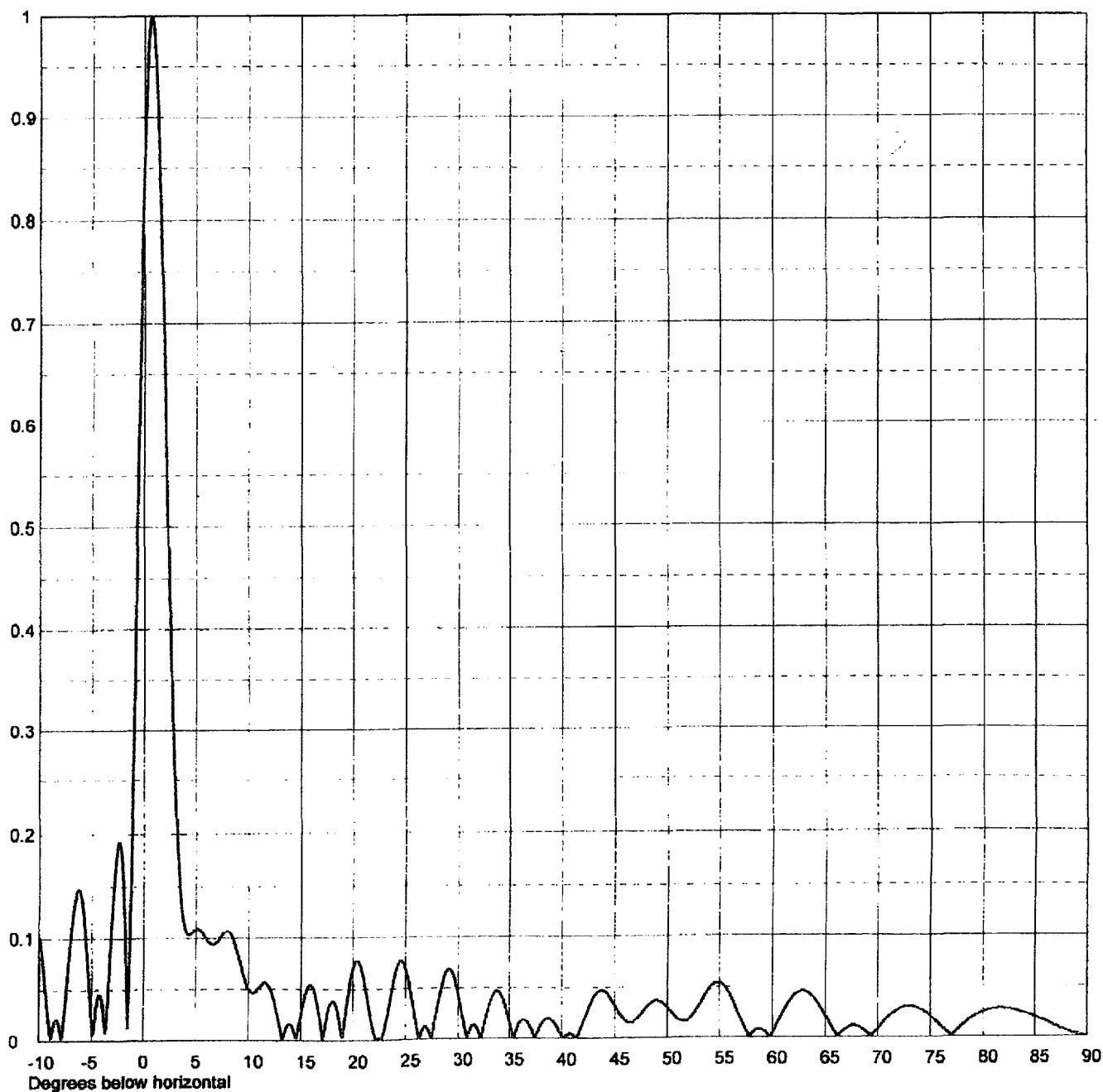
Date	23 Mar 2000	
Call Letters	WLEX-DT	Channel 39
Location	Lexington, KY	
Customer		
Antenna Type	TFU-30GTH 06	

### ELEVATION PATTERN

RMS Gain at Main Lobe  
RMS Gain at Horizontal  
Calculated / Measured

27.0 (14.31 dB)  
18.7 (12.72 dB)  
Calculated

Beam Tilt 0.75 Degrees  
Frequency 623.00 MHz  
Drawing # 30G27007-90



Remarks:



Exhibit No.

E-2b

Date

23 Mar 2000

Call Letters

WLEX-DT

Channel

39

Location

Lexington, KY

Customer

Antenna Type

TFU-30GTH 06

## ELEVATION PATTERN

RMS Gain at Main Lobe

27.0 (14.31 dB)

Beam Tilt

0.75 Degrees

RMS Gain at Horizontal

18.7 (12.72 dB)

Frequency

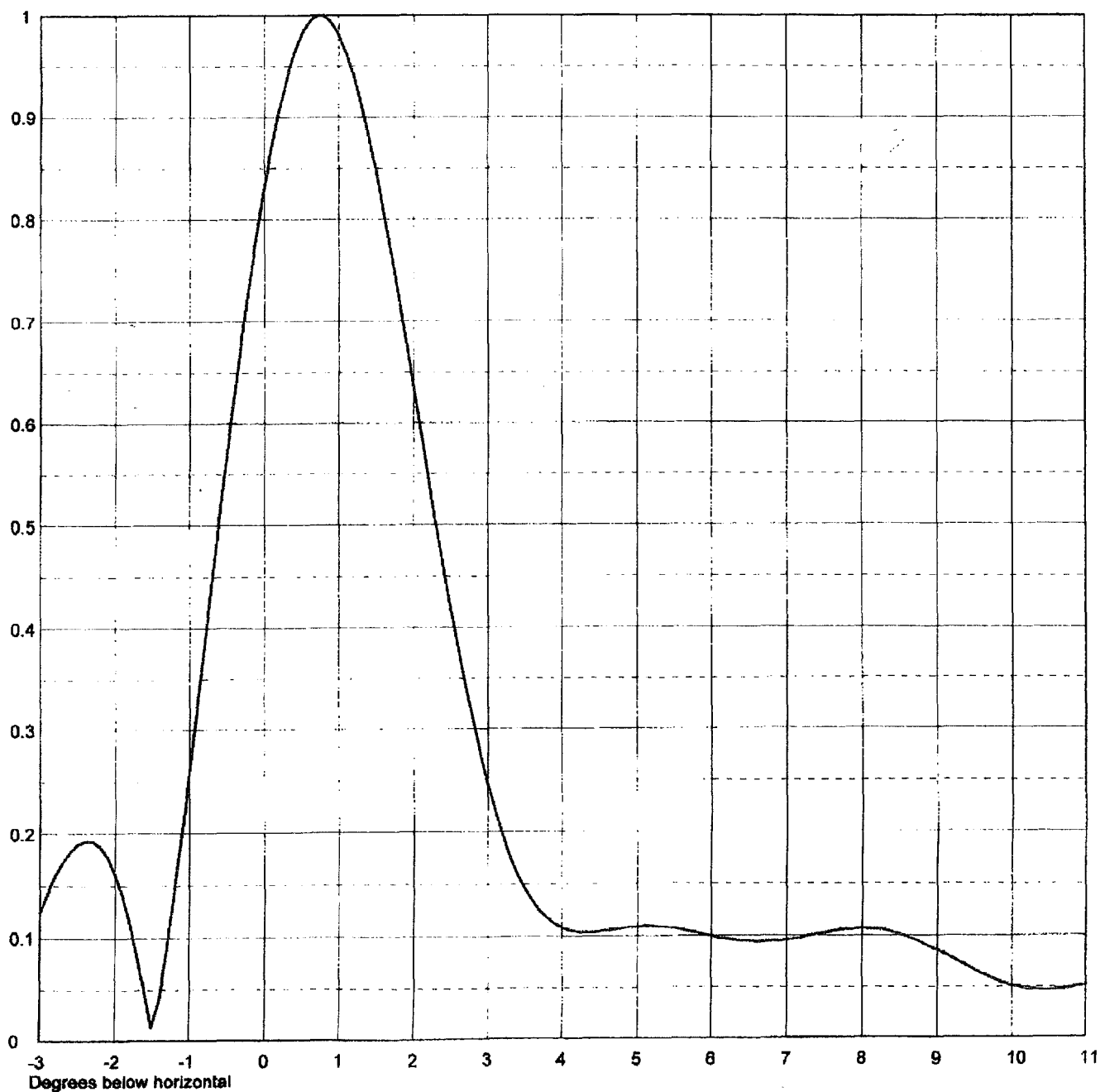
623.00 MHz

Calculated / Measured

Calculated

Drawing #

30G27007



Remarks:



Exhibit No.  
E-2c

Date **23 Mar 2000**  
 Call Letters **WLEX-DT** Channel **39**  
 Location **Lexington, KY**  
 Customer  
 Antenna Type **TFU-30GTH 06**

### TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **30G27007-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.108	2.4	0.458	10.6	0.048	30.5	0.017	51.0	0.018	71.5	0.023
-9.5	0.066	2.6	0.378	10.8	0.049	31.0	0.005	51.5	0.016	72.0	0.027
-9.0	0.015	2.8	0.307	11.0	0.052	31.5	0.013	52.0	0.017	72.5	0.029
-8.5	0.018	3.0	0.247	11.5	0.057	32.0	0.006	52.5	0.022	73.0	0.030
-8.0	0.012	3.2	0.198	12.0	0.052	32.5	0.012	53.0	0.031	73.5	0.029
-7.5	0.033	3.4	0.161	12.5	0.035	33.0	0.032	53.5	0.040	74.0	0.027
-7.0	0.096	3.6	0.135	13.0	0.011	33.5	0.046	54.0	0.048	74.5	0.024
-6.5	0.141	3.8	0.118	13.5	0.010	34.0	0.046	54.5	0.053	75.0	0.020
-6.0	0.141	4.0	0.108	14.0	0.015	34.5	0.035	55.0	0.054	75.5	0.015
-5.5	0.091	4.2	0.104	14.5	0.003	35.0	0.016	55.5	0.050	76.0	0.010
-5.0	0.017	4.4	0.103	15.0	0.024	35.5	0.003	56.0	0.042	76.5	0.005
-4.5	0.038	4.6	0.105	15.5	0.048	36.0	0.015	56.5	0.030	77.0	0.001
-4.0	0.037	4.8	0.107	16.0	0.054	36.5	0.018	57.0	0.018	77.5	0.006
-3.5	0.029	5.0	0.108	16.5	0.039	37.0	0.011	57.5	0.007	78.0	0.011
-3.0	0.124	5.2	0.109	17.0	0.008	37.5	0.002	58.0	0.003	78.5	0.015
-2.8	0.158	5.4	0.108	17.5	0.023	38.0	0.013	58.5	0.007	79.0	0.019
-2.6	0.182	5.6	0.106	18.0	0.038	38.5	0.019	59.0	0.007	79.5	0.022
-2.4	0.193	5.8	0.103	18.5	0.029	39.0	0.018	59.5	0.003	80.0	0.024
-2.2	0.188	6.0	0.100	19.0	0.003	39.5	0.012	60.0	0.004	80.5	0.026
-2.0	0.162	6.2	0.097	19.5	0.041	40.0	0.003	60.5	0.014	81.0	0.027
-1.8	0.116	6.4	0.095	20.0	0.070	40.5	0.003	61.0	0.024	81.5	0.028
-1.6	0.050	6.6	0.094	20.5	0.077	41.0	0.004	61.5	0.034	82.0	0.027
-1.4	0.038	6.8	0.095	21.0	0.061	41.5	0.002	62.0	0.041	82.5	0.027
-1.2	0.140	7.0	0.096	21.5	0.032	42.0	0.014	62.5	0.045	83.0	0.026
-1.0	0.255	7.2	0.098	22.0	0.007	42.5	0.028	63.0	0.046	83.5	0.024
-0.8	0.378	7.4	0.101	22.5	0.002	43.0	0.040	63.5	0.043	84.0	0.023
-0.6	0.503	7.6	0.104	23.0	0.010	43.5	0.046	64.0	0.037	84.5	0.021
-0.4	0.624	7.8	0.106	23.5	0.037	44.0	0.046	64.5	0.029	85.0	0.019
-0.2	0.735	8.0	0.107	24.0	0.064	44.5	0.041	65.0	0.020	85.5	0.016
0.0	0.832	8.2	0.106	24.5	0.077	45.0	0.032	65.5	0.011	86.0	0.014
0.2	0.909	8.4	0.103	25.0	0.069	45.5	0.023	66.0	0.003	86.5	0.012
0.4	0.964	8.6	0.099	25.5	0.045	46.0	0.017	66.5	0.004	87.0	0.010
0.6	0.994	8.8	0.093	26.0	0.015	46.5	0.015	67.0	0.008	87.5	0.007
0.8	1.000	9.0	0.086	26.5	0.007	47.0	0.018	67.5	0.011	88.0	0.005
1.0	0.981	9.2	0.078	27.0	0.011	47.5	0.023	68.0	0.010	88.5	0.003
1.2	0.941	9.4	0.070	27.5	0.004	48.0	0.030	68.5	0.008	89.0	0.002
1.4	0.882	9.6	0.062	28.0	0.030	48.5	0.035	69.0	0.004	89.5	0.001
1.6	0.808	9.8	0.056	28.5	0.055	49.0	0.037	69.5	0.002	90.0	0.000
1.8	0.724	10.0	0.051	29.0	0.068	49.5	0.035	70.0	0.007		
2.0	0.635	10.2	0.048	29.5	0.063	50.0	0.030	70.5	0.013		
2.2	0.545	10.4	0.047	30.0	0.043	50.5	0.024	71.0	0.019		

Remarks:

## EXHIBIT 1

### Request for Waiver of 47 C.F.R. § 73.3572

By this application, WLEX Communications, LLC ("WLEX") seeks authorization for the construction of digital facilities for WLEX-TV (the "Station"). WLEX has submitted a Petition for Rule Making seeking to substitute channel 39 as the Station's paired DTV allocation for the transition period in lieu of channel 22, as originally allotted. As explained below, WLEX is submitting the instant application to ensure protection of the Station's maximized digital facilities on the proposed channel. Accordingly, waiver of Section 73.3572 of the Commission's rules (47 C.F.R. § 73.3572) is hereby requested to the extent necessary for the Commission to process the application. WLEX requests that the Commission defer processing the application until such time as it has acted upon the previously submitted Petition for Rule Making.

On November 29, 1999, the President signed into law the Community Broadcasters Protection Act of 1999 ("CBPA") creating a new Class A television service and according existing low power television ("LPTV") stations "primary" status *vis-à-vis* full power stations if they met certain minimum programming requirements.<sup>1</sup> However, the CBPA also provided that a full power station would be permitted to "maximize" its DTV facilities irrespective of interference with the new Class A stations so long as the station complied with certain procedures and filed a maximization application on or before May 1, 2000.<sup>2</sup> To resolve any "technical problems" that may obstruct maximization, the CBPA also allows such a station to change its DTV channel assignment without protecting Class A stations.<sup>3</sup>

The Commission has not yet had the opportunity to act on WLEX's Petition for Rule Making to substitute a new DTV allotment for the Station. However, it is not clear that maximized facilities proposed in applications submitted after the statutory deadline of May 1, 2000 have certain protection against Class A stations. If the Station were to wait to submit the instant construction permit application until after the Commission had acted upon the Petition for Rule Making, it is possible that the Station's maximized service area would not be protected. In light of (1) Congress' intention to provide DTV broadcasters with a full opportunity to maximize; (2) Congress' intention to have the specifics of such maximization known by a date certain through the filing of an application on or before May 1, 2000; and (3) the fact that the CBPA does not explicitly account for the circumstances described herein, WLEX accordingly is requesting waiver of Section 73.3572 to permit the submission of this construction permit application for the Station. Grant of the waiver request is in the public interest because it will allow the Commission to authorize maximized facilities for the Station upon grant of the requested channel substitution.

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<sup>1</sup> Community Broadcasters Protection Act of 1999, Pub. L. No. 106-113, 113 Stat. Appendix I at pp. 1501A-594 – 1501A-598 (1999), *codified at* 47 U.S.C. § 336(f).

<sup>2</sup> 47 U.S.C. § 336(f)(1)(D).

<sup>3</sup> *Id.*



**EXHIBIT 2**

**Request for Waiver of 47 C.F.R. § 73.3517 and, if necessary, § 73.3518**

By this application, WLEX Communications, LLC ("WLEX") seeks authorization for the construction of digital facilities for WLEX-TV (the "Station"). WLEX has submitted a concurrent application to construct the Station's DTV facilities on its allotted channel. As explained below, WLEX is submitting the instant application to ensure protection of the Station's maximized digital facilities. Accordingly, waiver of Section 73.3517 of the Commission's rules (47 C.F.R. § 73.3517) is hereby requested. To the extent necessary, WLEX also seeks waiver of Section 73.3518.

On November 29, 1999, the President signed into law the Community Broadcasters Protection Act of 1999 ("CBPA") creating a new Class A television service and according existing low power television ("LPTV") stations "primary" status *vis-à-vis* full power stations if they met certain minimum programming requirements.<sup>1</sup> However, the CBPA also provided that a full power station would be permitted to "maximize" its DTV facilities irrespective of interference with the new Class A stations so long as the station complied with certain procedures and filed a maximization application on or before May 1, 2000.<sup>2</sup> To resolve any "technical problems" that may obstruct maximization, the CBPA also allows such a station to change its DTV channel assignment without protecting Class A stations.<sup>3</sup>

The Commission has not yet had the opportunity to act on WLEX's Petition for Rule Making to substitute a new DTV allotment for the Station. As such, the Station's ultimate DTV channel cannot be known with certainty at this time. It is not clear that maximized facilities proposed in applications submitted after the statutory deadline of May 1, 2000 have certain protection against Class A stations. If the Station filed only one DTV construction permit application for one of the two channels at issue and, for some reason, that permit was not granted, it is possible that the Station's maximized service area on the other channel would not be protected. In light of (1) Congress' intention to provide DTV broadcasters with a full opportunity to maximize; (2) Congress' intention to have the specifics of such maximization known by a date certain through the filing of an application on or before May 1, 2000; and (3) the fact that the CBPA does not explicitly account for the circumstances described herein, WLEX accordingly is requesting waiver of Section 73.3517 to permit the submission of contingent DTV construction permit applications for the Station. Grant of the waiver request is in the public interest because it will allow the Commission to authorize maximized facilities for whichever DTV channel the Station ultimately receives.

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<sup>1</sup> Community Broadcasters Protection Act of 1999, Pub. L. No. 106-113, 113 Stat. Appendix I at pp. 1501A-594 – 1501A-598 (1999), *codified at* 47 U.S.C. § 336(f).

<sup>2</sup> 47 U.S.C. § 336(f)(1)(D).

<sup>3</sup> *Id.*